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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,072	04/20/2004	Andrew Harvey Barr	200208446-1	6038

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INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER
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WANG, ALBERT C

ART UNIT	PAPER NUMBER
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2115

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/29/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/829,072	BARR ET AL.	
	Examiner	Art Unit	
	Albert Wang	2115	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-10 and 12-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-10 and 12-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____   | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. This Office action is responsive to the amendment filed 2 November 2006.

#### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-4, 6 and 7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Independent claim 1 is currently amended to include the limitation “wherein said changing of said performance of said rack equipment is based at least in part on a potential change to a client’s requirements.” According to the specification, the performance of the rack equipment is changed with respect to a capacity demand plan (page 14, lines 6-26). The capacity demand plan does not appear to be based a potential change to a client’s requirements, indicating anticipation or prediction of a potential change. The specification does mention tailoring “to possible actions available to a particular piece of rack equipment” (page 15, lines 15-16). Such “possible changes” are interpreted as being predetermined options of a piece of rack equipment.

#### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 8-10 and 12-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Fung, U.S. Patent No. 6,859,882.

A rack equipment capacity on demand system comprising:

rack equipment for processing data (figs. 1 & 6, server modules SM);

a capacity demand plan component for controlling operational changes to said rack equipment based on a capacity demand plan (figs. 1 & 6, management modules MM; col. 8, line 7, line 55 – col. 8, line 23); and

a communications bus for coupling said rack equipment and said capacity demand plan component, wherein said communications bus is utilized for communicating information between said capacity demand plan component and said rack equipment (fig. 2, backplane; col. 12, lines 55-67, backplane 103), and

a master management control center for coordinating control of rack equipment among a plurality of racks (figs. 1 & 6, local or remote management node).

As per claim 9, Fung teaches said capacity demand plan component controls the amount of rack equipment resources assigned to an application (; col. 8, line 7, line 55 – col. 8, line 23).

As per claim 10, Fung teaches said capacity demand plan component switches on and off said rack equipment in accordance with said capacity demand plan. (col. 8, lines 24-38).

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As per claim 12, Fung teaches said capacity demand plan is dynamically adjustable on the fly (col. 8, lines 24-38).

As per claim 13, Fung teaches said capacity demand plan is structured in accordance with business needs of a client (col. 8, lines 24-38).

As per claim 14, Fung teaches a memory for storing equipment information and capacity demand plan information; and a cross indexing component for cross indexing said equipment information and said capacity demand plan information (col. 20, lines 46-67, memory for storing algorithm 432 and activity indicators from server modules).

***Claim Rejections - 35 USC § 103***

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over K. Rajamani and C. Lefurgy, "On Evaluating Request-Distribution Schemes for Saving Energy in Server Clusters", In Proceedings of the IEEE International Symposium on Performance Analysis of Systems and Software, March 2003 (hereinafter "Rajamani"), in view of Fung, U.S. Patent No. 6,859,882.

As per claim 15, Rajamani teaches a computer-useable storage medium comprising computer-readable program code embodied therein for causing a computer system to implement a power pricing performance instructions comprising:

a capacity demand detection module for detecting indications of requests for capacity demand changes covered by a capacity demand plan (sec. 4.2, Request distribution);

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a capacity demand administration module for administering examination of capacity demand changes (sec. 4.2, Managing server power-states); and

an instruction generation module for generating rack equipment performance adjustment commands to implement said capacity demand plan instructions (sec. 4.1, for management blade commands).

As per claim 15, Rajamani does not expressly teach a master management control center for coordinating control of rack equipment among a plurality of racks. Fung teaches such a master management control center (fig. 1, local or remote management node for multiple racks). At the time of the invention, it would have been obvious to one of ordinary skill in the art that Fung's control center is applicable to a system of multiple racks, as centralized control is well known in data centers.

As per claim 16, Rajamani teaches a telemetry monitoring module for monitoring characteristics and activity of rack equipment associated with said equipment performance adjustments commands (sec. 4.1).

As per claim 17, Rajamani teaches an event spawning module for generating power pricing events (sec. 4.4).

As per claim 18, Rajamani teaches said instruction generation module comprises functionality for generating a command to postpone processing (sec. 4.4).

As per claim 19, Rajamani teaches said capacity demand plan information is an agreement between a host and a client and is structured in manner to accommodate business activities of said client (sec. 4.2).

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As per claim 20, Rajamani teaches said telemetry monitoring module confirms that said performance equipment adjustment commands are complied with (sec. 4.2).

***Conclusion***

**Examiner's note:**

Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert Wang whose telephone number is 571-272-3669. The examiner can normally be reached on M-F (9:30 - 6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Lee can be reached on 571-272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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CHUN CAO  
PRIMARY EXAMINER